

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising:
receiving a stream of messages at a communication intermediary, the stream including two independently compressed types of multiplexed messages, further wherein the compressed messages are multiplexed, the first type of compressed message being a control message, the second type of compressed message being an user message;

detecting the control messages-message at [[a]] the communication intermediary from [[a]] the compressed-stream of messages;

decompressing the detected control messages-message at the communication intermediary; and

passing user messages from the compressed-stream of messages through the communication intermediary without modifications, wherein the user messages-message is are not decompressed at any point between a first end device and a second end device.

2. (Currently Amended) The method claim 1, wherein the control ~~messages-message~~ comprise comprises a multiplex identifier for indicating the multiplexing of the control message and the user message.

3. (Original) The method of claim 2, wherein the multiplex identifier is located at the beginning of a communication session.

4. (Currently Amended) The method of claim 2, wherein detecting the control messages message at the communication intermediary from the ~~compressed-stream~~ of messages comprises detecting the multiplex identifier.

5. (Currently Amended) The method of claim 2, wherein the user ~~messages-are messages-message~~ is a message without the multiplex identifier.

6. (Currently Amended) The method of claim 1, wherein the control ~~messages-are message~~ is a hop-by-hop messages-message and the user ~~messages-are message~~ is an end-to-end messagesmessage.

7. (Currently Amended) A apparatus comprising:

an input configured to receive a ~~compressed-stream~~ of messages originating from a first end device intended for a second end device, the stream including two independently compressed types of multiplexed messages, the first type of compressed message being a control message, the second type of compressed message being an user message;

an output configured to transmit messages intended for the second end device;

a processor configured to detect the control messages-message included in the ~~compressed-stream~~ of messages received by the input, wherein the processor is further configured to decompress the control ~~messages-message~~ and direct ~~non-control-the user messages-message~~ from the ~~compressed-stream~~ of messages to be communicated through the output without modification, wherein the ~~non-controlmessages-are-user message is not~~ decompressed at any point between the first end device and the second end device.

8. (Currently Amended) The apparatus of claim 7, wherein the processor is configured to detect the control ~~messages-message~~ by identifying a special bytecode for indicating the multiplexing of the control message and the user message contained in the control messagesmessage.

9. (Canceled)

10. (Currently Amended) The apparatus of claim 7, wherein the control ~~messages-are message is~~ used at the beginning of a session and the processor is configured to enter a forwarding mode after the control ~~messages-are-message is~~ received.

11. (Previously Presented) The apparatus of claim 7, wherein the modification comprises decompression.

12. (Currently Amended) A system comprising:

a first end device comprising a compressor and a decompressor;

a second end device comprising a compressor and a decompressor; and

an intermediate relay configured to receiving a stream of messages at a communication intermediary, the stream including two independently compressed types of multiplexed messages, the first type of compressed message being a control message, the second type of

compressed message being an user message, wherein the intermediate relay is further configured to detect and decompress the control messages-message in the stream of messages originating from the first end device, and pass the user messages-message intended for the second end device through without decompression, wherein the user ~~messages-are~~ message is not decompressed at any point between the first end device and the second end device.

13. (Currently Amended) The system of claim 12, wherein the intermediate relay is configured to detect control messages by detecting an identifier for indicating the multiplexing of the control message and the user message located in the stream of messages.

14. (Currently Amended) The system of claim 12, wherein the intermediate relay is configured to enter forwarding mode after the control messages-are message is received.

15-20 (Canceled)

21. (Currently Amended) The method of claim 1, wherein the control ~~messages-comprise~~ message comprises a multiplexing of compressed control and user-plane messages (MUCCUP) bytecode section.

22. (Previously Presented) The method of claim 21, wherein the MUCCUP bytecode section comprises a detectable pattern, wherein the detectable pattern indicates the presence of a control message.

23. (New) The method of claim 21, further comprising:

determining if the MUCCUP byte code section is used in the control message; and
in response to determining that the MUCCUP byte code section is used,
compressing all control-plane messages using the MUCCUP;
in response to determining that the MUCCUP byte code section is not used, not
compressing all control-plane messages using the MUCCUP.

24. (New) The method of claim 23, wherein after determining that the MUCCUP byte code section is used in the control message, the method further comprises:
receiving a subsequent message;

relaying the subsequent message without modification if the subsequent message does not include the MUCCUP byte code; and

decompressing the subsequent message if the subsequent message includes the MUCCUP byte code.